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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,711	06/20/2003	Albert R. DePetrillo	RONA.002US0	7592
25242	7590	05/28/2004		
VICTOR H. OKUMOTO P.O. BOX 6120 FREMONT, CA 94538				
EXAMINER HOANG, TU BA				
ART UNIT		PAPER NUMBER		
3742				

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/601,711

Applicant(s)

DEPETRILLO ET AL.

Examiner

Tu Ba Hoang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-35 and 48-55 is/are allowed.
- 6) ☒ Claim(s) 36-47 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/20/03&3/17/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 44 and 47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 44 and 47, each recites the limitation "said fourth connector" in line 3 (for claim 44) and line 4 (for claim 47). There is insufficient antecedent basis for this limitation in the claim or from the preceding claim. Should the term "fourth" be changed to "front" instead? Clarification is needed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 36-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Denton et al (US 4,266,113) cited by the Applicants. Denton et al shows a modular inductively coupled plasma torch assembly comprising a tubular plasma chamber 23, a detachable connector unit 21 held to a rear end of the tubular plasma chamber 23 as shown in Figure 1, the detachable rear connector unit 21 includes a first inlet port 4 fluidically coupled to the interior of the tubular plasma chamber 23 so as to allow a flow of a first material (i.e. plasma argon) to pass through the plasma chamber 23 and a second inlet port 8 fluidically coupled to the interior of the plasma chamber 23 (i.e. through sample tube 22) so as to allow a flow of a second material to pass through the tubular plasma chamber 23, and an inductively coupling member or load coil 3 for inductively applying energy to the first material flowing through the plasma chamber 23 in order to produce and sustain plasma in the plasma chamber 23, wherein the first and second material can be the same material such as argon, and wherein the detachable connector unit 21 (shown in Figure 2) further includes a detachable rear connector unit and a detachable front connector unit in which each connector unit is provided with a small rear o-ring having an inner diameter suitable for fitting around the outer diameter of the tubular plasma chamber 23 and a rear connector having an open end, wherein the rear end of the plasma chamber 23 is positioned within the open end of the rear connector and held in that position by compressing the small rear o-ring so as to apply force against the outer surface of the plasma chamber 23, a small rear cinch nut screwed into the outer threading of the open end of the rear connector so as to compress the small rear o-ring, a small rear seal ring configured to compress the small rear o-ring against a tapered wall of the open end of the rear connector when the small rear cinch nut is screwed into the outer threading of the open end of the rear connector, a small rear slip washer ring inserted between the small rear seal ring and the small rear cinch nut so as to inhibit torque applied to the rear cinch nut from being transferred to the small rear o-ring.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Streusand et al (US 4,926,021) and Conway et al (US ,713,711).

Allowable Subject Matter

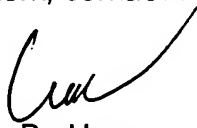
Claims 1-35 and 48-55 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not show or fairly suggest a modular inductively coupled plasma torch assembly which comprises a detachable first and second connector units positioned on the opposite ends of the torch assembly tubular jacket so as to hold the torch assembly tubular plasma chamber concentrically within the jacket and define an annular chamber between the outer surface of the plasma chamber and the inner surface of the jacket in the manner recited in claims 1 and 53.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Ba Hoang whose telephone number is (703) 308-3303. The examiner can normally be reached on Mon-Fri from 8:30AM to 5:00PM.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tu Ba Hoang
Primary Examiner
Art Unit 3742

May 24, 2004